APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,434	04/08/2004	William Wimsatt	CORA0001	7158

25235 7590 07/20/2005		EXAMINER
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1200 SEVENTEENTH ST	ART UNIT	PAPER NUMBER
DENVER, CO 80202	2121	

DATE MAILED: 07/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _08 April 2004_.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-19_ is/are pending in the application.

    4a) Of the above claim(s) _13-18_ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-12 and 19_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _12/17/2004_.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1.   Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I.   Claims 1-12 and 19, drawn to a networked home automation system and control unit for controlling a home automation system, classified in class 700, subclass 83;

   II.   Claim 13, drawn to a generic automation system, classified in class 700, subclass 1; and

   III.   Claims 14-18, drawn to a network utilizing a message broker; classified in class 709, subclass 220+.

The inventions are distinct, each from the other because of the following reasons: Inventions I, II and II are related as sub combinations disclosed as usable together in a single combination. The sub combinations are distinct from each other if they are shown to be separately usable.

In the instant case, Invention I has separate utility such as in a system lacking the utilization of a communication network, as is the case with group II, and in a system lacking the utilization of a message broker, as is the case with group III. Invention II has separate utility such as in a system lacking the utilization of a message broker, as is the case with group III. See MPEP 806.05(d).

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Groups II-III, and vice versa, restriction for examination purposes as indicated is proper.

During a telephone conversation with Stuart Langley on July 12, 2005, a provisional election was made without traverse to prosecute the invention of group I, claims 1-12. Affirmation of this election must be made by applicant in replying to this

Office action. Claims 13-18 are thereby withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

2.   Claim 3, "the packet communication network" lacks proper antecedent basis.

Claim 3, "interpret the message", in light of the other claim language is grammatically improper.

Claim 4, it appears "specify" should read "specific".

Claim 7 should depend from claim 5, not from itself.

Claims 8-9, control panels should be plural (i.e. control panels).

Claim 10, line 6, "coupled" should read "couple".

Claim 10, line 13, "the serial communication interface" lacks proper antecedent basis.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Zeller et al., U.S. Patent Application No. 2003/0037170.

As per claim 1, Zeller et al. teaches a home automation system (e.g. home communication network) comprising:

-       a plurality of control panels (e.g. the "panels" are interpreted to be the functional equivalent of incorporating the computer functions of the service terminal; Figure 1 element 26, in addition to the server function, Figure 1 element 24, into the first or

second network terminating device, Figure 1 elements 14 and 16, respectively; [0047] and [0053]);

-        a communication network coupling the control panels (e.g. Figure 1 elements 18, 20 and 22); and

-        a plurality of controlled devices, wherein each device implements an interface which communicates control messages (e.g. "interface" has been interpreted to be the functional equivalent of the utilization of a link of the building functions, Figure 1 element 38 or in the alternative, Figure 1 element 44, which references a "in house interface") wherein the plurality of control panels are operable to generate command messages relevant to one of the controlled devices and wherein the plurality of control panels are operable to handle status messages relevant to one of the controlled devices (e.g. these functions are interpreted to be the functional equivalent of allowing the intelligent network terminating devices to monitor and control building functions in the same manner as the central building communication and information server, Figure 1 element 24, [0022], [0047],[0053], [0100] and [0108]).

As per claim 2, Zeller et al teaches the control panel being directly connected to a controlled device (e.g. Figure 1 element representing the "cabling" which may connect the intelligent network terminating device, or building communication server, with any one of the many controlled devices).

As per claim 3, although Zeller does not explicitly mention "packets", within the context of the disclosed invention, it is a feature that is inherent to IP (Internet Protocol) communications, and since IP communications and the use of the Internet are both contemplated by Zeller (e.g. [0002], [0048], [0054], [0071] and [0110]), the use of packets is inherent to Zeller's disclosed system since this is how information is communicated, that is, by way of sending and receiving packets of data.

As per claim 4, since the applicant has not provided an explicit meaning for what is meant by "other controlled devices", these devices may be considered to be the

equivalent of any controlled device (i.e. component) in the control system, and therefore, this claim is believed to be adequately anticipated by Zeller's disclosure of using an IEEE 802.3 protocol (e.g. [0021]), an ISDN protocol (e.g. [0012]) or other communication protocols (e.g. [0106]) for communicating between the intelligent network terminating device and any one of the multiple connected devices which are accessed using the INHOUSE Bus or which are accessed using the functions implemented by incorporating the functions of the central server into one of the intelligent network terminating devices because the devices must be able to communicate using these protocols or the system would not function as desired, if at all, and therefore these features are inherent to the disclosure of Zeller et al.

5.   Claims 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Gonzales et al, U.S. Patent No. 6,834,208.

As per claims 10 and 19, Gonzales et al. teaches a control unit (e.g. the control unit has been interpreted to be the functional equivalent of a participating device in a home control system, as disclosed by Gonzales et al, since each device, in essence represents a smart device in that each device is concurrently a control unit and a controlled unit; Abstract), for a home system, comprising:

-       a processor (e.g. Figure 2, representing the hardware associated with each device; see specifically element 62);

-       a memory for storing data and programmed instructions (e.g. Figure 2; elements 32, 34 and 36

-       a communication interface configured to couple to external control subsystems (e.g. inherent to controlling an external load, such as a light, since there must be some type of communication interface in order for the microcontroller to send commands to the load controller, from the microcontroller, for controlling the light);

-       a network interface configured to couple to other control units and exchange control messages with the other control units (e.g. Figure 2 element 56 and Figure 4 element 80); and

- a plug-in framework executing on the processor, and a plurality of plug-in applications coupled with the plug-in framework and operable to perform specific functions related to generating and responding to home control messages using a serial communication interface and the network interface (e.g. Figure 4 elements 80 and 82).

As per claim 11, a built in library of platform drivers, wherein each driver implements specific functionality for controlling hardware on the home control unit (e.g. Figure 4 element 82).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeller et al., as applied to claim 1 above, in view of Graziano et al., U.S. Patent Application No. 2002/011698.

As per claims 5 and 8, Zeller does not explicitly teach the control panels implementing a plug in framework that enables the addition of software modules to define functions.

Graziano et al. teaches a home automation control system for remotely controlling home related devices, wherein the home has a home attendant (interpreted to be the functional equivalent of Zeller's Intelligent Network Terminating Device(s)) which is comprised of home attendant programs (e.g. Figure 4B element 36) which is software (e.g. Figure 4B element 3) contained in a memory (e.g. Figure 4B element 34).

Clearly, the programs have the capability of being modified in relation to the desires or needs of a particular person or person(s) associated with a specific home, and therefore, it would have been obvious at the time the invention was made to have

allowed the incorporation of Graziano et al into the system disclosed by Zeller et al for the purpose of allowing specific functions relating to specific devices to be changed or altered based on the needs or desires of the system, in order to allow greater flexibility in handling many different types of controllable devices.

As per claim 6, when interpreting Zeller's combined system (Zeller in view of Graziano), it seems more than obvious to allow each home attendant (i.e. each Intelligent Network Terminating Device(s)) the ability to perform functions irrespective of what the other Intelligent Network Terminating Device(s), or other home attendant units, are doing. That being said, to allow independent functioning of each home attendant or terminating device would have been obvious to one of ordinary skill in the art for the purpose of allowing each home to be separately, but concurrently, controlled, and this would have been obvious at the time the invention was made.

As per claims 7-8, Zeller et al does not explicitly teach the utilization of a web server and a web browser for controlling the controlled devices in the home automation network.

Graziano et al teaches the aforementioned features, including the utilization of device drivers, within the context of a home automation system (e.g. Figure 1, Figure 4B and Figure 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Graziano into the system disclosed by Zeller since both inventions are related to analogous art and since the web related features would allow Zeller's system to be remotely controlled through implementation of the Internet, thereby greatly increasing the flexibility and allowing a user to utilize a very well known communication methodology so that the user can centrally control and/or remotely control the devices from any where in the world, and this would have been obvious to one of ordinary skill in the art at the time the invention was made.

8.   Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zeller's combined system (Zeller in view of Graziano), as applied to claim 7 above, in further view of Official Notice.

As per claim 9, Official Notice is taken with respect to the use of Macromedia as a software oriented means of performing control functions with regards to a home automation system, and its inclusion would have been obvious at the time the invention was made so as to allow a flexible way of interacting with the controlled devices.

The applicant's attention is directed to Podolsky, U.S. Patent Application No. 2004/0215694, specifically [0013], and Holt et al., U.S. Patent Application No. 2003/0169289, specifically [0055] for support for the Examiner's position of Official Notice with respect to the use of Macromedia in a home automation system.

9.   Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gonzales et al, as applied to claim 10 above, in further view of Humpleman et al., U.S. Patent Application No. 2005/0120301.

As per claim 12, Gonzales et al does not explicitly teach a discovery process implemented on the processor, wherein the process interrogates other control systems and subsystems to learn device-specific signaling protocols for communicating control information with the other interrogated control systems.

Humpleman et al teaches a network discovery methodology in which a home network, in conjunction with a dynamic host configuration protocol server, is used for the discovery of home devices that are powered on and connected to the home network (e.g. [0024], [0054], [0086]-[0087] and [0093]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Humpleman et al into Gonzales's disclosed system for the purpose of allowing the system the ability to know what devices are connected and which are not, so as to allow an avoidance of needlessly sending commands to devices which are either not connected, or are not functioning (e.g. turned on), and this would have been obvious to one of ordinary skill in the art since both inventions are related to analogous art in that they are both directed

towards home automation systems, and the inclusion of the aforementioned features would aid in making sure that commands are not needlessly sent to devices which cannot use, for whatever reason(s), the commands, thereby greatly improving the efficiency and reliability of the home network control system.

Conclusion

10.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald D. Hartman Jr. whose telephone number is (571) 272-3684. The examiner can normally be reached on Mon.-Fri., 11:00 - 8:30 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

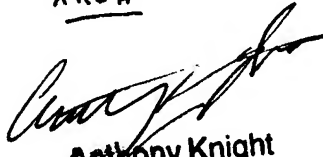Ronald D Hartman Jr.
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July 14, 2005   X RO H

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